

ABSTRACT

Optical device and method for protecting an optical communications route

A section of tapered optical fibre is provided to protect optical components from catastrophic damage that may propagate within an optical route. The tapered section functions as a fuse to arrest the propagation of optical power induced damage by leaking optical power from a waveguiding region to below a threshold, below which further propagation of damage is not supported.

10 Figure 1

FIG. 1
is a schematic diagram of an optical device 100 for protecting an optical communications route. The device 100 includes a tapered optical fibre section 110. The tapered optical fibre section 110 is configured to function as a fuse to arrest the propagation of optical power induced damage by leaking optical power from a waveguiding region to below a threshold, below which further propagation of damage is not supported.